



Agency for Healthcare Research and Quality
Advancing Excellence in Health Care



NATIONAL
GUIDELINE
CLEARINGHOUSE

General

Guideline Title

The role of endoscopy in dyspepsia.

Bibliographic Source(s)

ASGE Standards of Practice Committee, Ikenberry SO, Harrison ME, Lichtenstein D, Dominitz JA, Anderson MA, Jagannath SB, Banerjee S, Cash BD, Fanelli RD, Gan SI, Shen B, Van Guilder T, Lee KK, Baron TH. The role of endoscopy in dyspepsia. *Gastrointest Endosc*. 2007 Dec;66(6):1071-5. [40 references] [PubMed](#)

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Eisen GM, Dominitz JA, Faigel DO, Goldstein JA, Kalloo AN, Petersen BT, Raddawi HM, Ryan ME, Vargo JJ 3rd, Young HS, Fanelli RD, Hyman NH, Wheeler-Harbaugh J. The role of endoscopy in dyspepsia. *Gastrointest Endosc* 2001 Dec;54(6):815-7. [24 references]

The American Society for Gastrointestinal Endoscopy (ASGE) reaffirmed the currency of the guideline in 2011.

Recommendations

Major Recommendations

Recommendations were graded on the strength of the supporting evidence (Grades 1A--3). Definitions of the recommendation grades are presented at the end of the "Major Recommendations" field.

Summary

Patients with dyspepsia who are older than 50 years of age and/or those with alarm features should undergo endoscopic evaluation. (1C)

Patients with dyspepsia who are younger than 50 years of age and without alarm features may undergo an initial test-and-treat approach for *Helicobacter pylori* (*H pylori*). (1B)

Patients who are younger than 50 years of age and are *H pylori* negative can be offered an initial endoscopy or a short trial of proton-pump inhibitors (PPI) acid suppression. (2B)

Patients with dyspepsia who do not respond to empiric PPI therapy or have recurrent symptoms after an adequate trial should undergo endoscopy. (3)

Definitions:

Grades of Recommendation*

Grade of Recommendation	Clarity of Benefit	Methodologic Strength/ Supporting Evidence	Implications
1A	Clear	Randomized trials without important limitations	Strong recommendation; can be applied to most clinical settings
1B	Clear	Randomized trials with important limitations (inconsistent results, nonfatal methodologic flaws)	Strong recommendation; likely to apply to most practice settings
1C+	Clear	Overwhelming evidence from observational studies	Strong recommendation; can apply to most practice settings in most situations
1C	Clear	Observational studies	Intermediate-strength recommendation; may change when stronger evidence is available
2A	Unclear	Randomized trials without important limitations	Intermediate-strength recommendation; best action may differ depending on circumstances or patients' or societal values
2B	Unclear	Randomized trials with important limitations (inconsistent results, nonfatal methodologic flaws)	Weak recommendation; alternative approaches may be better under some circumstances
2C	Unclear	Observational studies	Very weak recommendation; alternative approaches likely to be better under some circumstances
3	Unclear	Expert opinion only	Weak recommendation; likely to change as data become available

*Adapted from Guyatt G, Sinclair J, Cook D, Jaeschke R, Schunemann H, Pauker S. Moving from evidence to action: grading recommendations—a qualitative approach. In: Guyatt G, Rennie D, eds. Users' guides to the medical literature. Chicago: AMA Press; 2002. p. 599-608.

Clinical Algorithm(s)

A clinical algorithm is provided in the original guideline document for evaluation of dyspepsia.

Scope

Disease/Condition(s)

Dyspepsia

Note: The Rome III Committee defined dyspepsia as one or more of the following three symptoms:

- Postprandial fullness
- Early satiety
- Epigastric pain or burning

Guideline Category

Diagnosis

Evaluation

Management

Risk Assessment

Clinical Specialty

Family Practice

Gastroenterology

Internal Medicine

Intended Users

Physicians

Guideline Objective(s)

To define the role of upper endoscopy in the diagnostic evaluation and management of patients with dyspepsia

Target Population

Patients with dyspepsia

Note: Patients with heartburn are excluded from this guideline.

Interventions and Practices Considered

"Test-and-treat" approach including noninvasive testing for *Helicobacter pylori* (*H pylori*) such as serology, urea breath testing (UBT), and stool antigen and subsequent treatment of *H pylori*

Endoscopy

Acid suppressive agents (proton pump inhibitors)

Major Outcomes Considered

Sensitivity, specificity, and negative and positive predictive values of diagnostic tests

Signs and symptoms

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

2007 Guideline

In preparing this guideline, a search of the medical literature was performed by using PubMed, supplemented by accessing the "related articles" feature of PubMed. Additional references were obtained from the bibliographies of the identified articles and from recommendations of expert consultants. When little or no data exist from well-designed prospective trials, emphasis is given to results from large series and reports from recognized experts.

2011 Reaffirmation

A search of medical databases (PubMed, MEDLINE) and annual meeting proceedings from 1990 to 2011 was conducted by one to two Standards of Practice Committee members.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus

Rating Scheme for the Strength of the Evidence

Not applicable

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

2007 Guideline

Guidelines for appropriate utilization of endoscopy are based on a critical review of the available data and expert consensus at the time the guidelines are drafted.

2011 Reaffirmation

A search of medical databases and annual meeting proceedings was conducted by one to two Standards of Practice Committee members with discussion and voting regarding novelty and informative value of new publications since the previous version of the guideline.

Rating Scheme for the Strength of the Recommendations

Grades of Recommendation*

Grade of Recommendation	Clarity of Benefit	Methodologic Strength/ Supporting Evidence	Implications
1A	Clear	Randomized trials without important limitations	Strong recommendation; can be applied to most clinical settings
1B	Clear	Randomized trials with important limitations (inconsistent results, nonfatal methodologic flaws)	Strong recommendation; likely to apply to most practice settings
1C+	Clear	Overwhelming evidence from observational studies	Strong recommendation; can apply to most practice settings in most situations
1C	Clear	Observational studies	Intermediate-strength recommendation; may change when stronger evidence is available
2A	Unclear	Randomized trials without important limitations	Intermediate-strength recommendation; best action may differ depending on circumstances or patients' or societal values
2B	Unclear	Randomized trials with important limitations (inconsistent results, nonfatal methodologic flaws)	Weak recommendation; alternative approaches may be better under some circumstances
2C	Unclear	Observational studies	Very weak recommendation; alternative approaches likely to be better under some circumstances
3	Unclear	Expert opinion only	Weak recommendation; likely to change as data become available

*Adapted from Guyatt G, Sinclair J, Cook D, Jaeschke R, Schunemann H, Pauker S. Moving from evidence to action: grading recommendations—a qualitative approach. In: Guyatt G, Rennie D, eds. *Users' guides to the medical literature*. Chicago: AMA Press; 2002. p. 599-608.

Cost Analysis

Published cost analyses were reviewed.

The test-and-treat approach is more cost effective than the initial endoscopy approach. Results from a meta-analysis of 5 randomized studies of test-and-treat versus an initial endoscopy showed a negligible improvement of symptoms in the endoscopy group but a savings of \$389 per patient in the test-and-treat group. Results from a large, randomized study that compared test-and-treat with initial endoscopy found no significant difference in dyspeptic symptoms at 1 year but with a 60% reduction in endoscopy utilization in the test-and-treat group.

A decision analysis of one study showed that cost-effectiveness of the test-and-treat approach versus empiric acid suppression depends on the prevalence of *Helicobacter pylori* (*H pylori*). If the incidence of *H pylori* is <20%, then empiric acid-suppression therapy is more cost effective.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

This document was reviewed and approved by the Governing Board of the American Society for Gastrointestinal Endoscopy.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified for each recommendation (see "Major Recommendations").

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate diagnostic evaluation and management of dyspepsia

Potential Harms

Drawbacks to the test-and-treat approach include the risk of *Clostridium difficile*-associated colitis and induction of antibiotic resistance.

Qualifying Statements

Qualifying Statements

Further controlled clinical studies may be needed to clarify aspects of this guideline. This guideline may be revised as necessary to account for changes in technology, new data, or other aspects of clinical practice.

This guideline is intended to be an educational device to provide information that may assist endoscopists in providing care to patients. This guideline is not a rule and should not be construed as establishing a legal standard of care or as encouraging, advocating, requiring, or discouraging any particular treatment. Clinical decisions in any particular case involve complex analysis of the patient's condition and available courses of action. Therefore, clinical considerations may lead an endoscopist to take a course of action that varies from these guidelines.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Clinical Algorithm

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

ASGE Standards of Practice Committee, Ikenberry SO, Harrison ME, Lichtenstein D, Dominitz JA, Anderson MA, Jagannath SB, Banerjee S, Cash BD, Fanelli RD, Gan SI, Shen B, Van Guilder T, Lee KK, Baron TH. The role of endoscopy in dyspepsia. *Gastrointest Endosc*. 2007 Dec;66(6):1071-5. [40 references] [PubMed](#)

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2001 Dec (revised 2007 Jan; reaffirmed 2011)

Guideline Developer(s)

American Society for Gastrointestinal Endoscopy - Medical Specialty Society

Source(s) of Funding

American Society for Gastrointestinal Endoscopy

Guideline Committee

Standards of Practice Committee

Composition of Group That Authored the Guideline

Committee Members: Steven O. Ikenberry, MD; M. Edwyn Harrison, MD; David Lichtenstein, MD; Jason A. Dominitz, MD, MHS; Michelle A. Anderson, MD; Sanjay B. Jagannath, MD; Subhas Banerjee, MD; Brooks D. Cash, MD; Robert D. Fanelli, MD, SAGES Representative; Seng-Ian Gan, MD; Bo Shen, MD; Trina Van Guilder, RN, SGNA Representative; Kenneth K. Lee, MD, NAPS GHAN Representative; Todd H. Baron, MD, *Chair*

Financial Disclosures/Conflicts of Interest

Not stated

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Eisen GM, Dominitz JA, Faigel DO, Goldstein JA, Kalloo AN, Petersen BT, Raddawi HM, Ryan ME, Vargo JJ 3rd, Young HS, Fanelli RD, Hyman NH, Wheeler-Harbaugh J. The role of endoscopy in dyspepsia. *Gastrointest Endosc* 2001 Dec;54(6):815-7. [24 references]

The American Society for Gastrointestinal Endoscopy (ASGE) reaffirmed the currency of the guideline in 2011.

Guideline Availability

Electronic copies: Available from the [American Society for Gastrointestinal Endoscopy Web site](#) .

Print copies: Available from the American Society for Gastrointestinal Endoscopy, 1520 Kensington Road, Suite 202, Oak Brook, IL 60523

Availability of Companion Documents

None available

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI on March 23, 2005. The information was verified by the guideline developer on March 31, 2005. This NGC summary was updated by ECRI Institute on March 4, 2008. This summary was updated by ECRI Institute on July 26, 2010 following the U.S. Food and Drug Administration (FDA) advisory on Proton Pump Inhibitors (PPI). The currency of the guideline was reaffirmed by the developer in 2011 and this summary was updated by ECRI Institute on October 16, 2012.

Copyright Statement

This NGC summary is based on the original guideline, which is subject to the guideline developer's copyright restrictions.

Disclaimer

NGC Disclaimer

The National Guideline Clearinghouse[®] (NGC) does not develop, produce, approve, or endorse the guidelines represented on this site.

All guidelines summarized by NGC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public or private organizations, other government agencies, health care organizations or plans, and similar entities.

Guidelines represented on the NGC Web site are submitted by guideline developers, and are screened solely to determine that they meet the NGC Inclusion Criteria which may be found at <http://www.guideline.gov/about/inclusion-criteria.aspx>.

NGC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or clinical efficacy or effectiveness of the clinical practice guidelines and related materials represented on this site. Moreover, the views and opinions of developers or authors of guidelines represented on this site do not necessarily state or reflect those of NGC, AHRQ, or its contractor ECRI Institute, and inclusion or hosting of guidelines in NGC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding guideline content are directed to contact the guideline developer.